



17-21 JUNE 2019

EU SUSTAINABLE ENERGY WEEK

SHAPING EUROPE'S ENERGY FUTURE

**NEW EPBD: THE VALUE OF
ACTUAL PERFORMANCE AND
DIGITALISATION**



#EUSEW19

**EUSEW19 session "lucky" 13: Wednesday 19 June, 9h00 – 10h30
NEW EPBD: THE VALUE OF ACTUAL PERFORMANCE AND
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Beyond building (energy) certification: verified performance, indoor climate and the evolution towards building renovation passport

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ALDREN & CEN-CE projects**



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Why « beyond » energy certification?

The situation

- only about **1-2%** of the **building stock** is renovated each year,
- around **85 %** of **building refurbishments** **do not** incorporate significant **energy efficiency improvements** (energy is not the trigger of renovation)

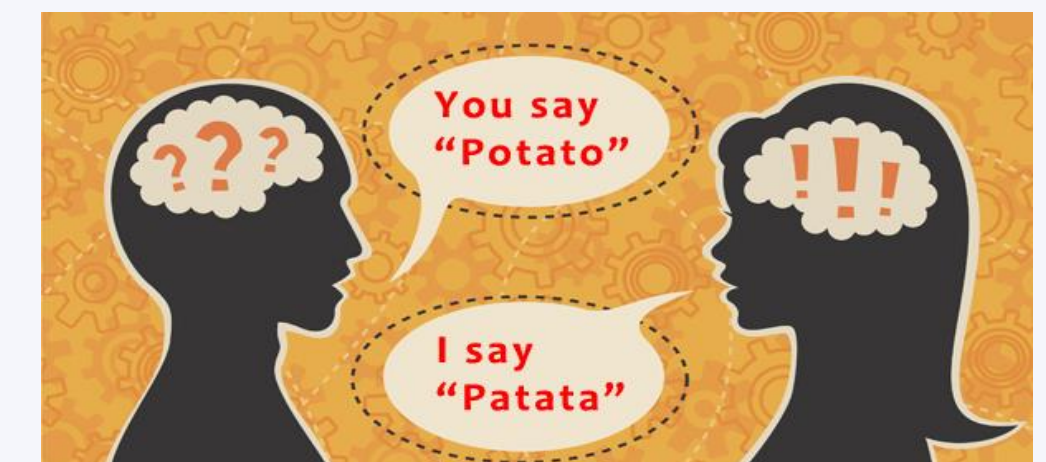
The problem

- one of the **major barriers** to improve building renovation numbers is the **absence of a holistic strategy**, the **lack of a strong relationship** and **communication between the different stakeholders** (building professionals, building owners, finance).



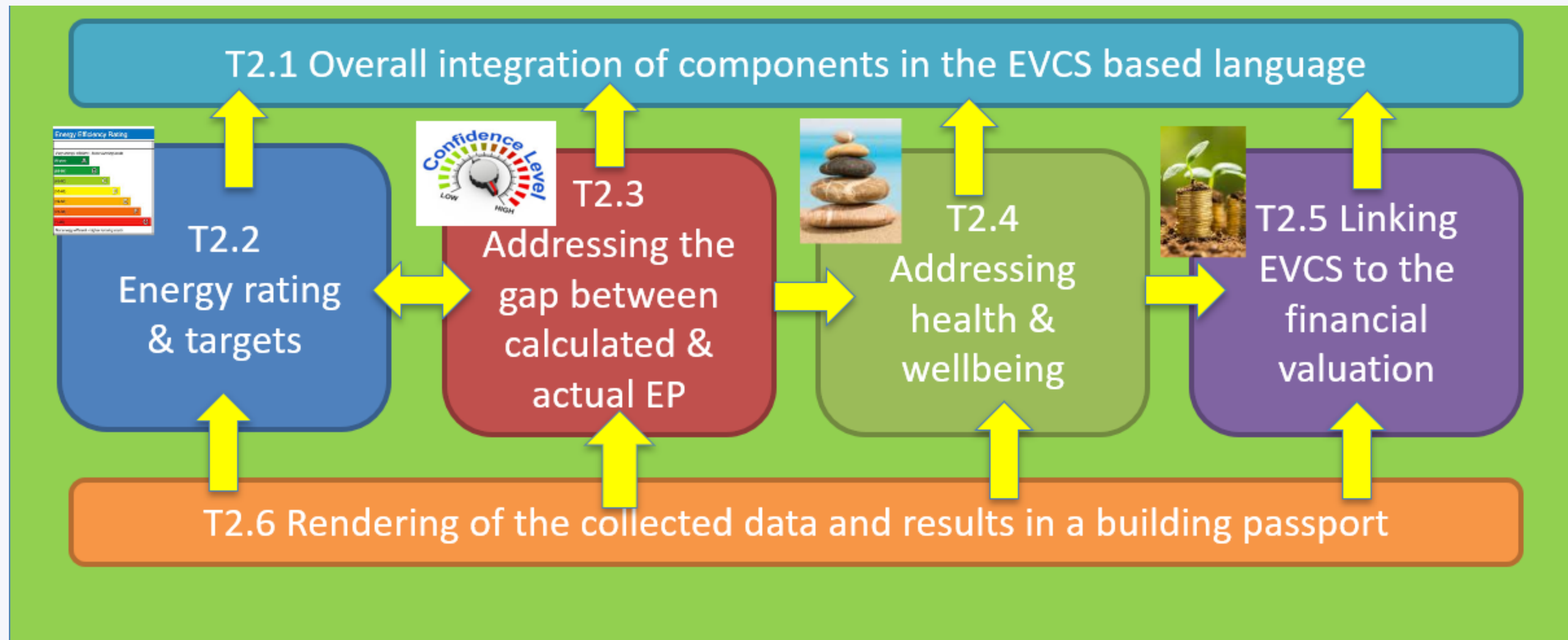
The solution

- **ALDREN common language** describing the holistic approach in renovation and allow communication (how a thermal bridge can talk to a banker)?



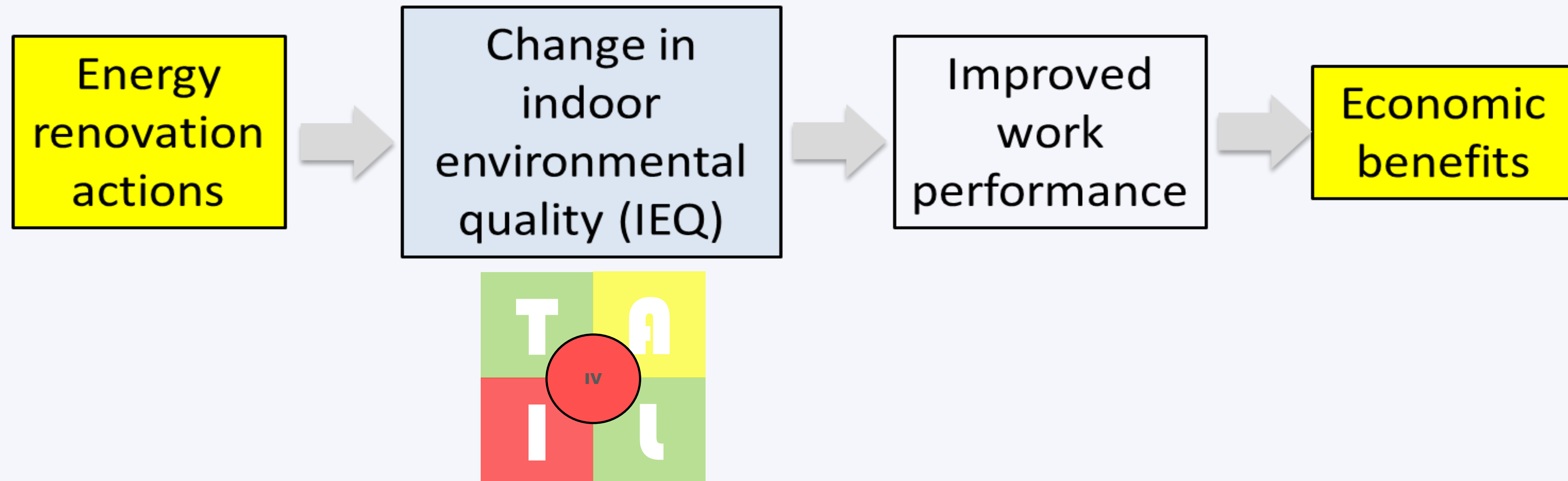
The ALDREN common language

6 topics for consolidation and adaptation of an EVCS (European Voluntary Certification Scheme)



ALDREN common language: Linking energy renovation actions to economic benefits

ALDREN health + well-being indicator TAIL

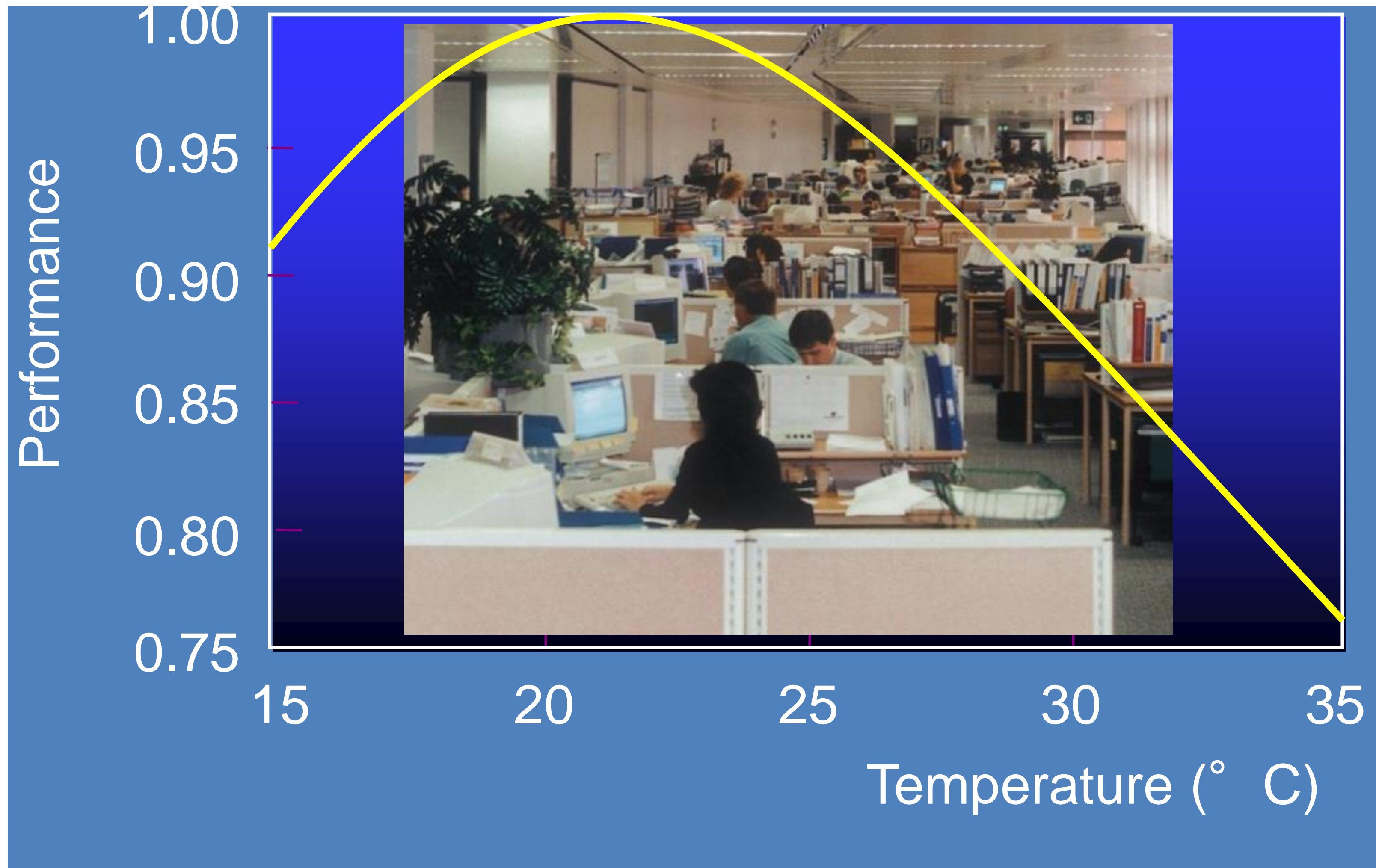


TAIL describing **T**hermal, **A**coustic, **I**ndoor air quality and **L**ighting (visual) environment

New challenges and requirements in revised EPBD

Example: Health & wellbeing

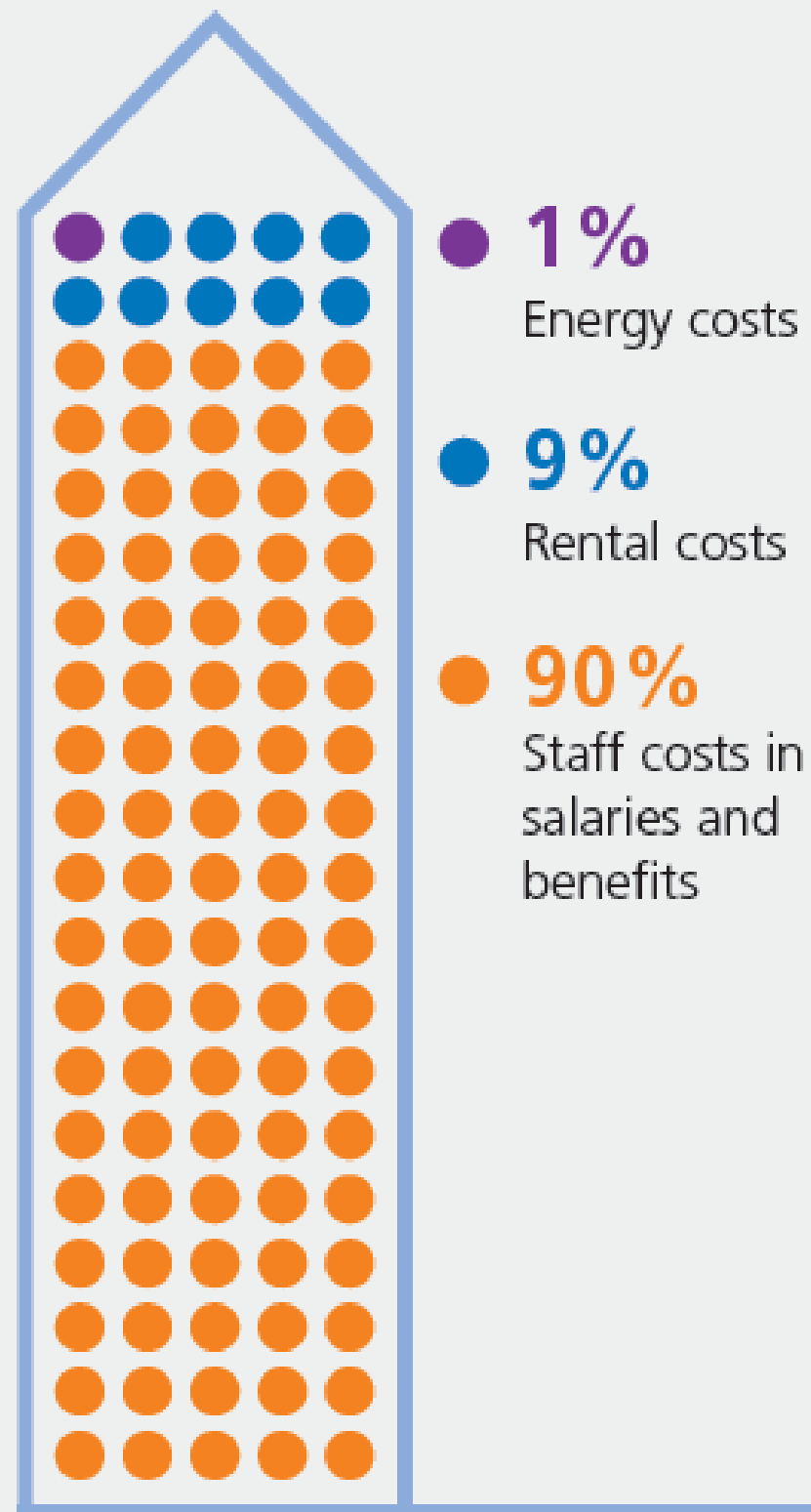
TEMPERATURE AND PERFORMANCE OF OFFICE WORK



Source: Seppanen et al. (2005)

Well-being: An additional motivation for energy renovation

Example: Cost structure in an office building



Even modest gains in work performance (staff costs)
can deliver
significant financial benefits



Energy renovation improving productivity is cost-effective



There is a need for:

- a **European Health + well-being indicator**
- a **link between health+ well-being indicator and the financial benefits**

Contribution of the ALDREN project to the transposition of revised Directive - May 2018

	T2.1 Overall integration	T2.2 EVCS	T2.3 Measured energy	T2.4 Health Wellbeing	T2.5 Financial evaluation	T2.6 Building passport	T3.2 Training
Art 1 Amendments Directive 2010/31/EU							
'(2) Article 2a Long-term renov. Strategy							
(g) evidence of expected energy savings and related to health, and air quality.							
3. mobilisation of investments							
(b) the reduction of the perceived risk							
(4') Article 7 existing buildings							
high-efficiency alternative systems and shall address healthy indoor climate'.							
(6) Article 10							
'6. link their financial measures to the targeted or achieved energy savings							

ALDREN outcomes are related to 17 paragraphs of revised EPBD amendments

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Conclusions

- Revised EPBD transposition **offers the possibility for common implementation**, considering technical progress and new challenges

but

- To increase the renovation rate and consider significant energy efficiency improvements a **holistic approach “beyond” building (energy) certification** including verified performance, indoor climate, building renovation passport and building asset valuation is needed

and

- Only a **common European transposition** will allow:
 - to be able to work on the “other side of the border”,
 - to have a “level playing field” (fair competition) for products,
 - to get common databases, common information.

- EU Commission **initiated EU projects** (e.g. ALDREN, CEN-CE to **help Member States** to transpose the new requirements of revised EPBD and to **favor common transposition**.



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Thank you for your attention!

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